

ABSTRACT

Divalent antibody fragments are described, each of which has one or more interchain bridges containing a synthetic or naturally occurring polymer selected from a polyalkylene, polyakenylen, polyoxyalkylene or polysaccharide. Each bridge may be the residue of a homo- or heterobifunctional cross-linking reagent and serves to link two heavy chains in each antibody fragment via the sulphur atoms of cysteine residues present in the chains. Each fragment may be attached to one or more effector or reporter molecules, and is of use in therapy or diagnostics where it has markedly improved binding and/or pharmacokinetic properties when compared to other antibody fragments which have the same number and type of polymer molecules but in which the polymer molecules are randomly attached.